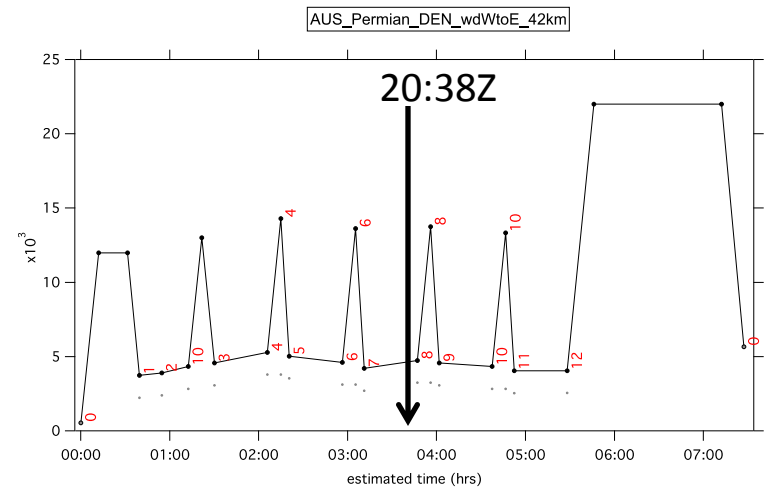
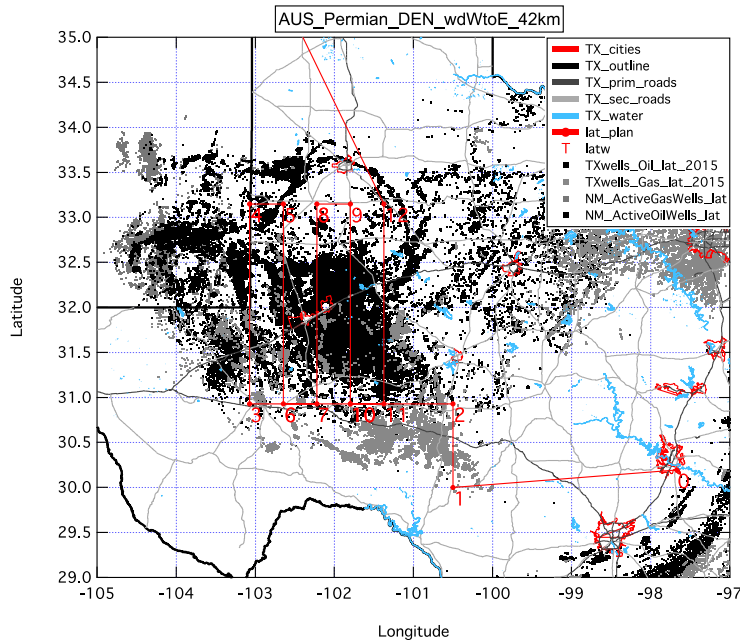


RAQMS 20150409 SONGNEX

30hr FX for 18Z April 09 (Permian Basin/Transit to Broomfield), 2015

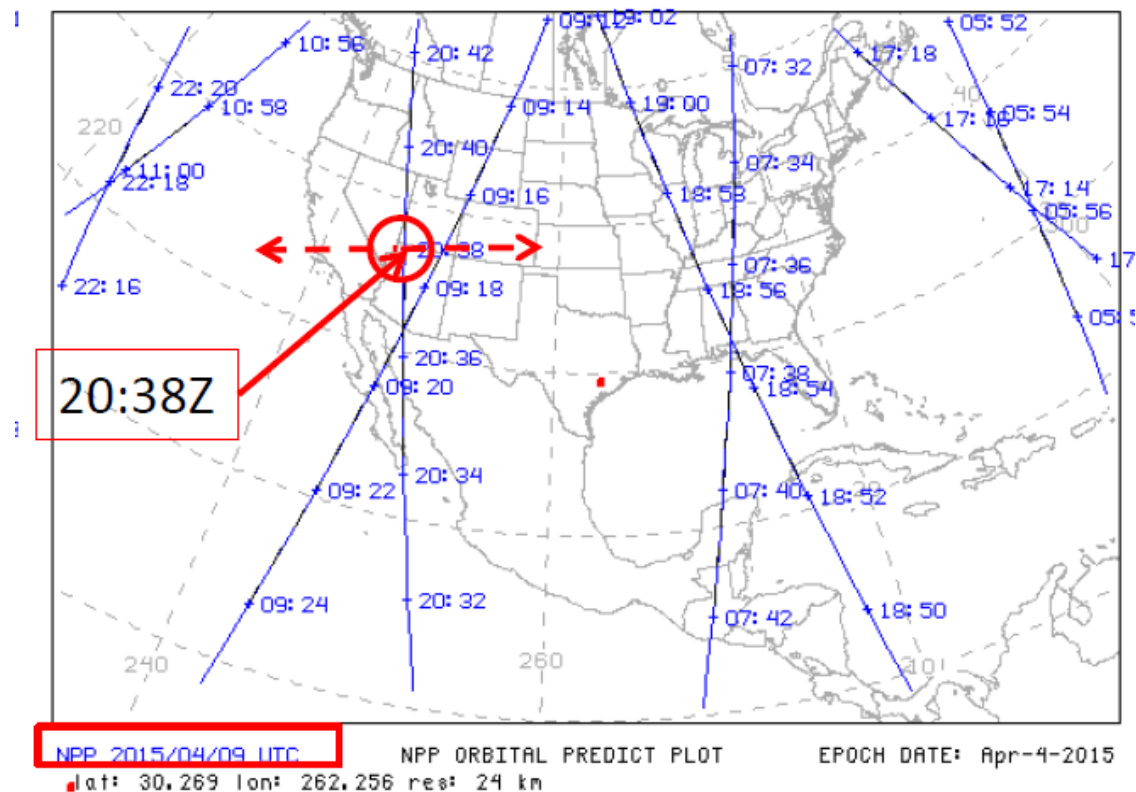


grndspeed= 115m/s, 224 knts

S-NPP (CrIS) overpass on 04/09

NUCAPS CO₂, O₃, CO, CH₄ Validation Opportunity –**Eastern edge of swath**

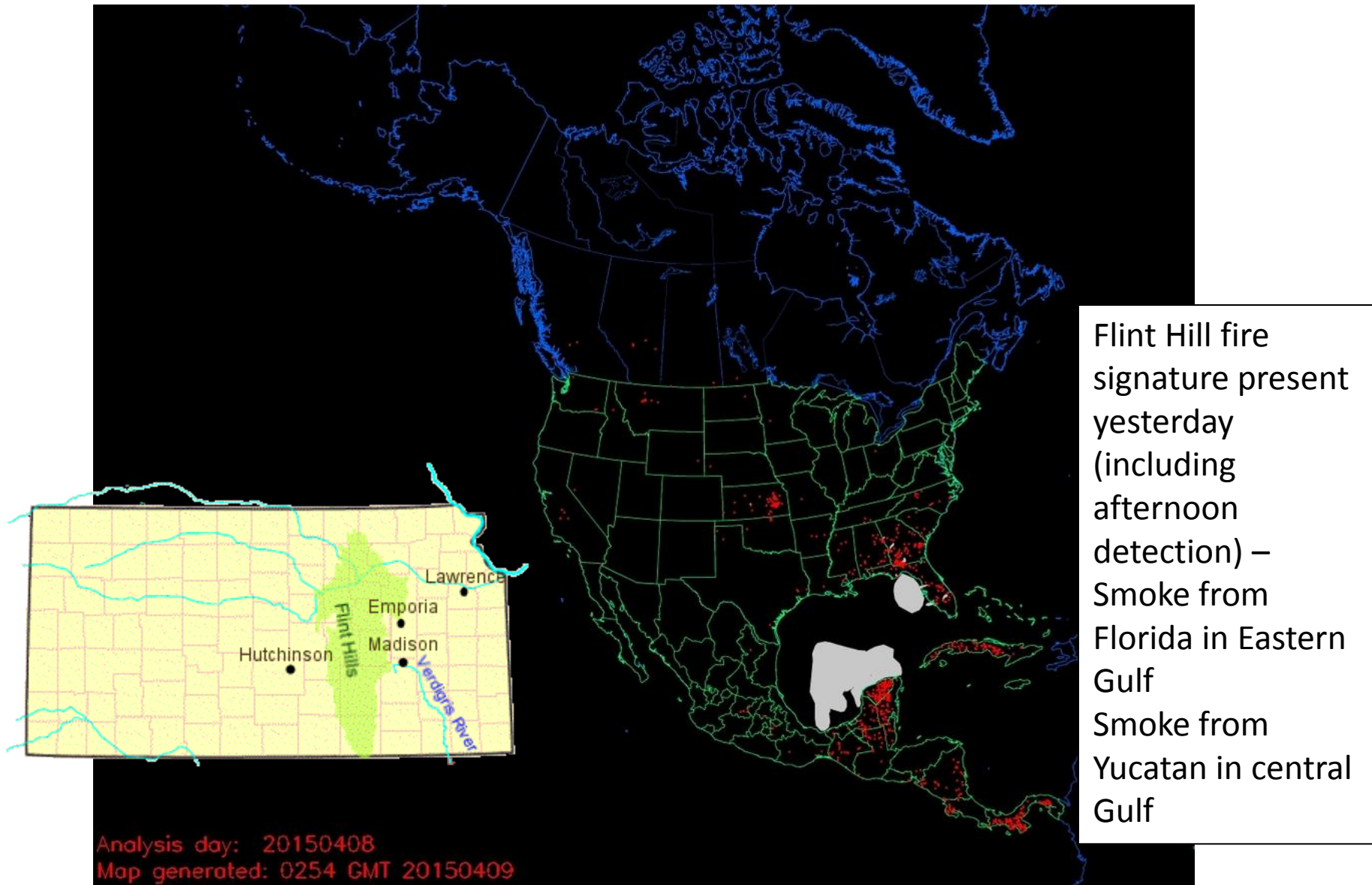
S-NPP overpass West of Broomfield at 20:38Z (2:38pm Mountain)



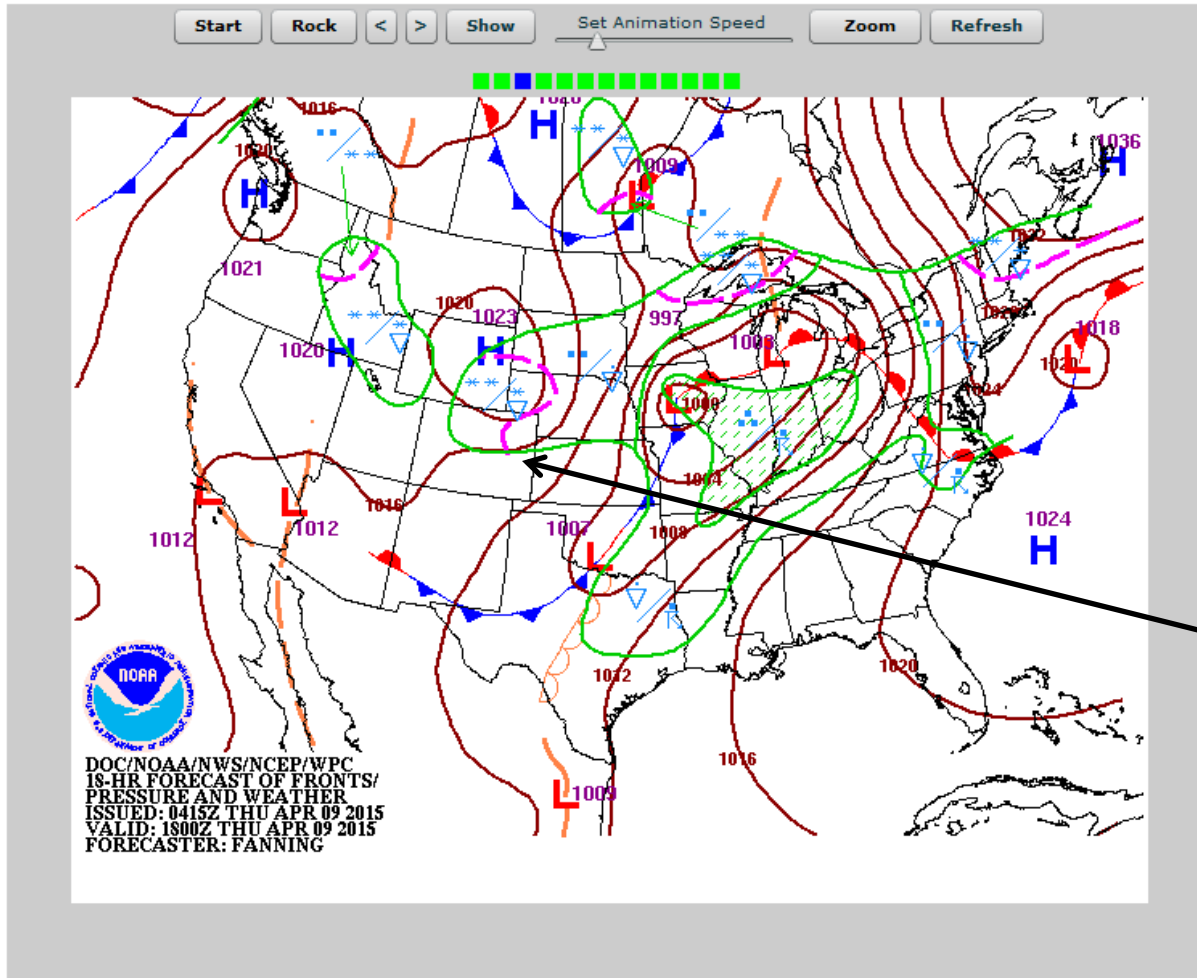
Approximate swath width

NESDIS Hazard Mapping System (HMS)

<http://www.ospo.noaa.gov/data/land/fire/currenthms.jpg>



36hr NCEP/WPC forecast valid 12Z 04/09/2015

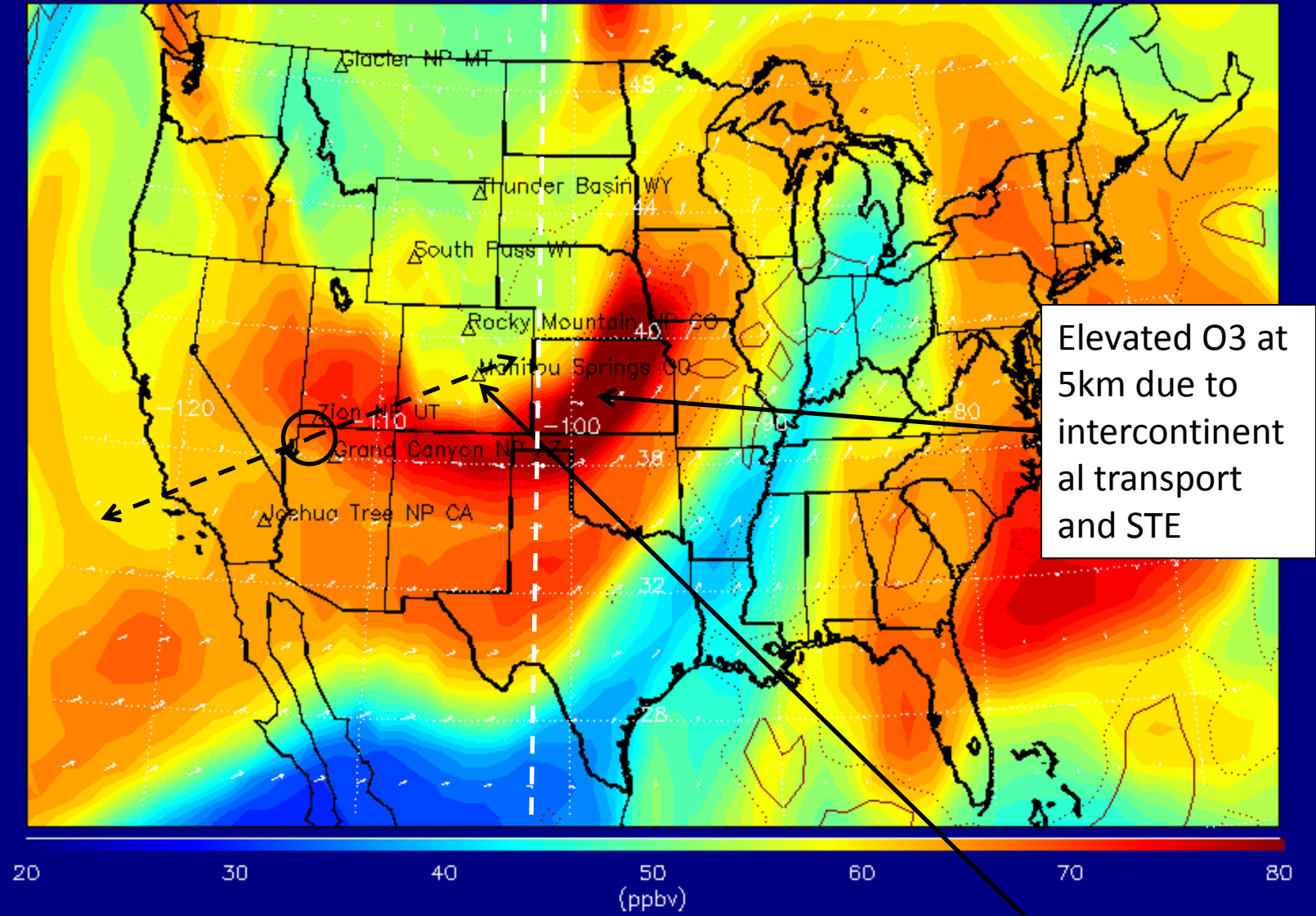


Broomfield in
wrap-around
precip

<http://www.hpc.ncep.noaa.gov/basicwx/day0-7loop.html>

05km O₃ 18Z 20150409

(MSL Pressure Contoured (white)/95-75% Convective Precip (Red) 95% CPCP=0.0824788 mm/hr



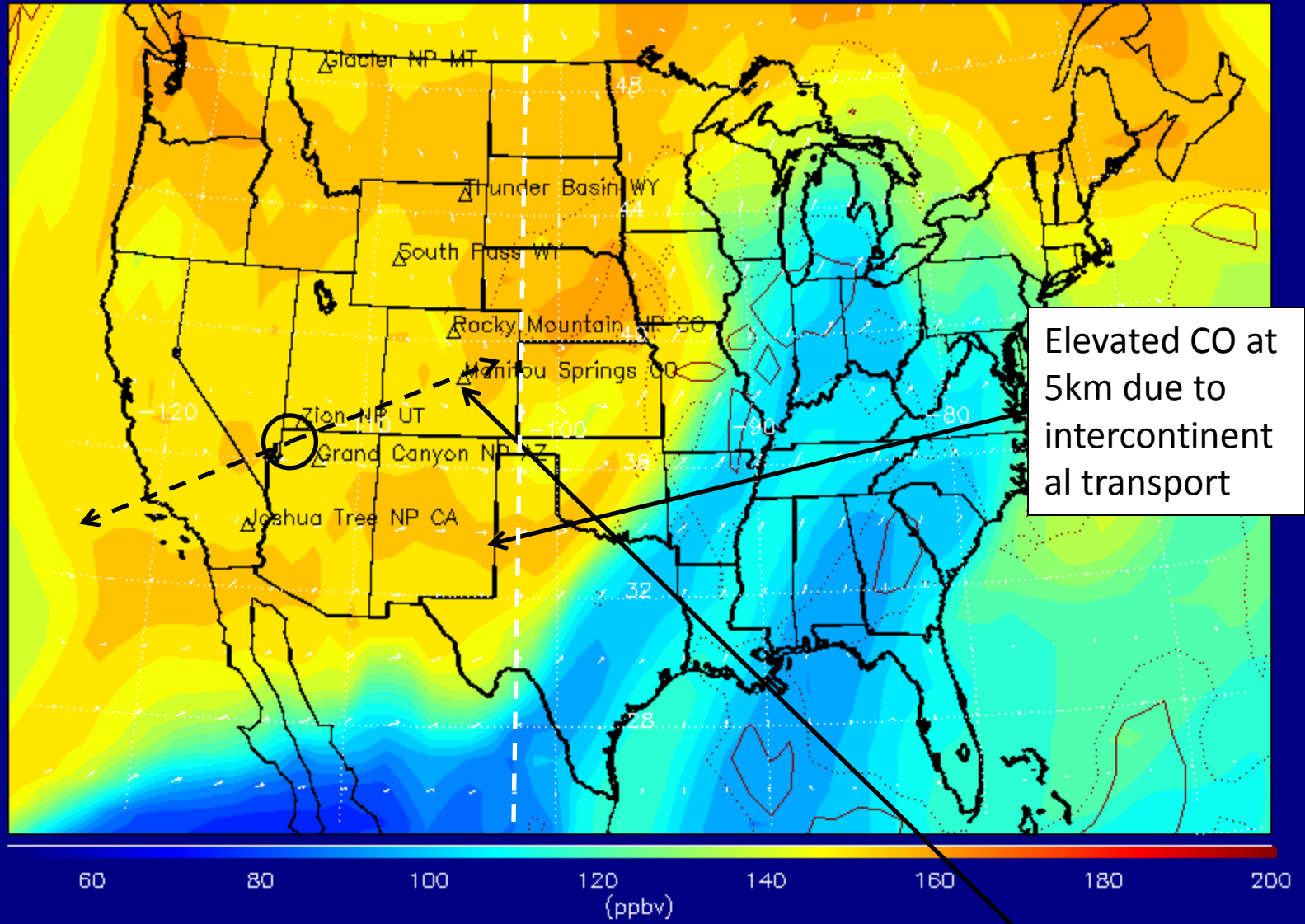
RAQMS₆ 30hr Fx Initialized 12Z 20150408

Broomfield on Eastern edge of S-NPP swath

Approximate swath width

03km AGL CO 18Z 20150409

(MSL Pressure Contoured (white)/95-75% Convective Precip (Red) 95% CPDP=0.0824788 mm/hr



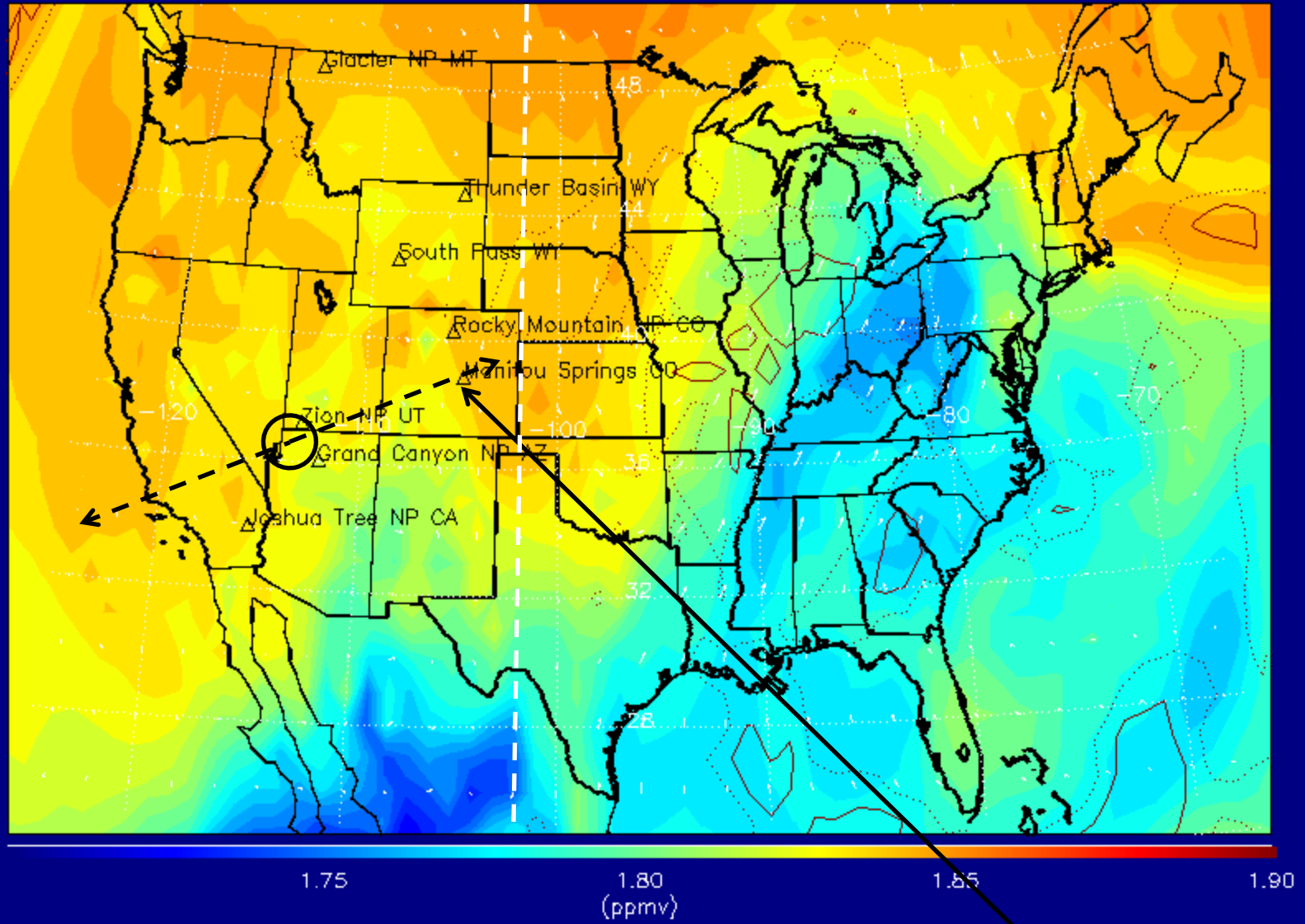
RAQMS₆ 30hr Fx Initialized 12Z 20150408

Broomfield on Eastern edge of S-NPP swath

Approximate swath width

01km AGL CH4 18Z 20150409

(MSL Pressure Contoured (white)/95–75% Convective Precip (Red) 95% CPDP=0.0824788 mm/hr

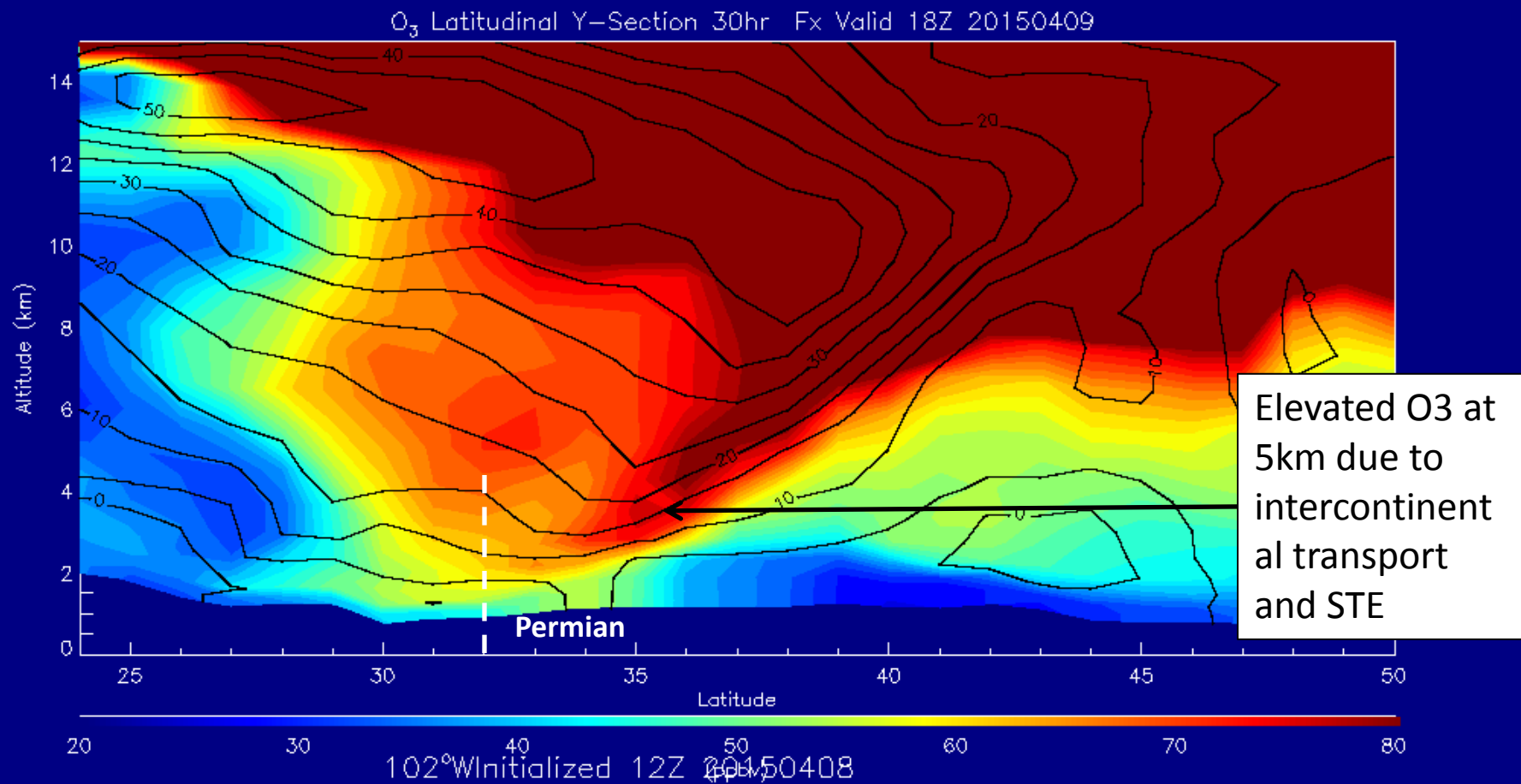


RAQMS₆ 30hr Fx Initialized 12Z 20150408

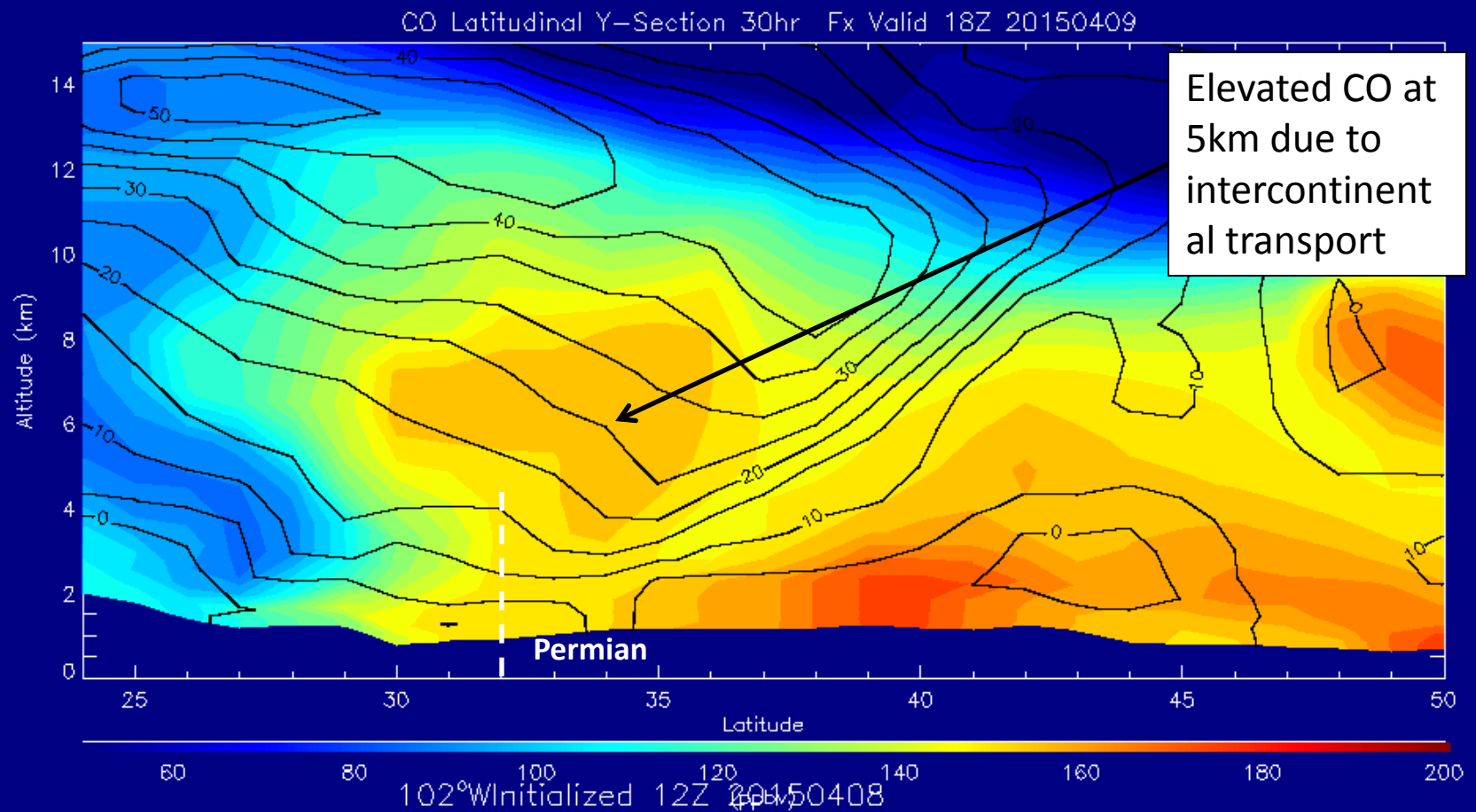
Broomfield on Eastern edge of S-NPP swath

RAQMS surface CH4 constrained with 1990 mixing ratio – introduces ~0.1ppmv low bias

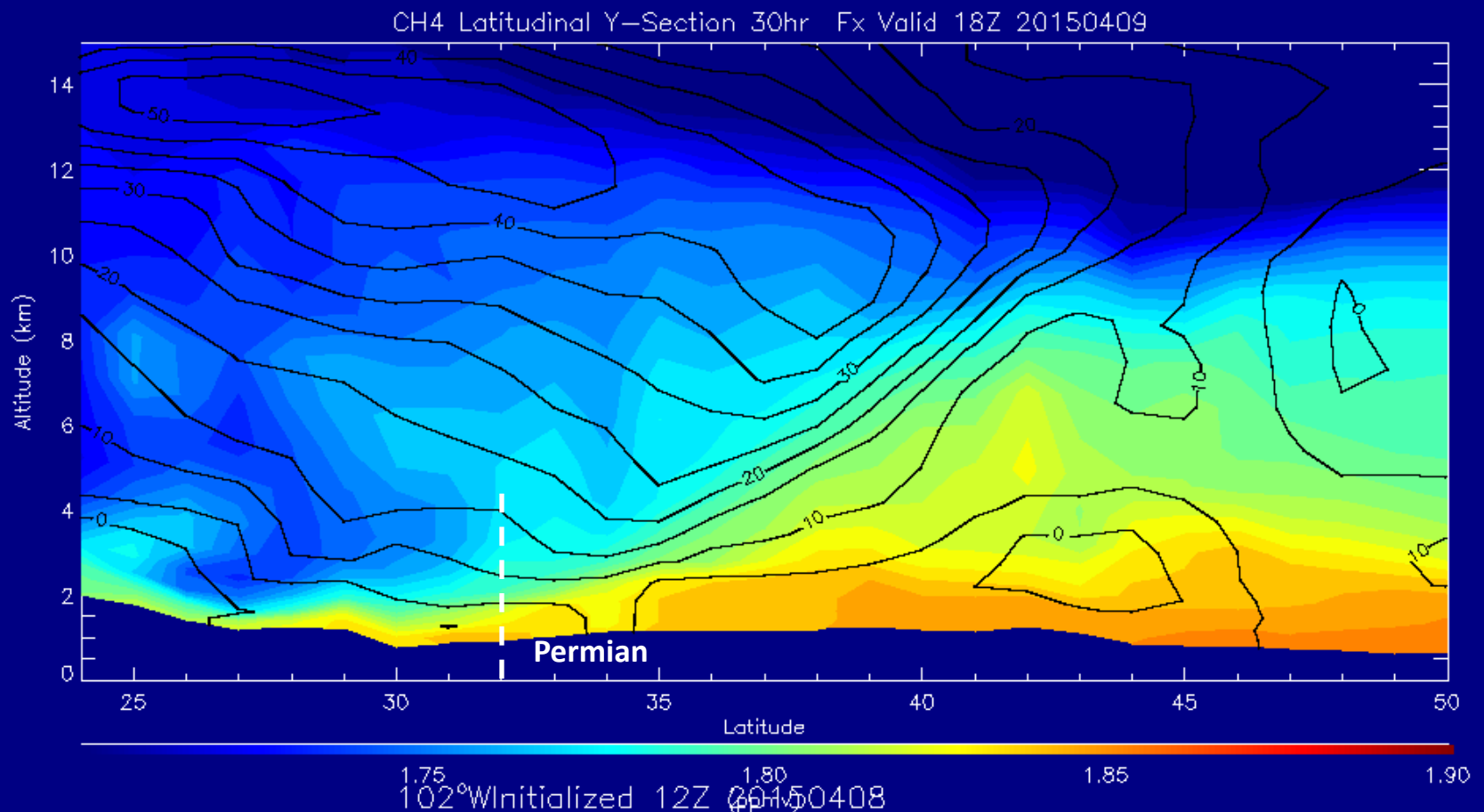
RAQMS 30hr FX O₃ Cross-section at 102W
(Permian Basin/Broomfield Transit)



RAQMS 30hr FX CO Cross-section at 102W
(Permian Basin/Broomfield Transit)



RAQMS 30hr FX CH₄ Cross-section at 102W
(Permian Basin/Broomfield Transit)



RAQMS surface CH₄ constrained with 1990 mixing ratio – introduces ~0.1ppmv low bias